## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Wendy A. Belluomini et al.

Assignee: International Business Machines Corp.

Title: FUSED BOOTH ENCODER MULTIPLEXER

Serial No.: 10/675,674 Filing Date: September 30, 2003

Examiner: C. Do Group Art Unit: 2193

Docket No.: AUS920030494US1

Austin, Texas October 23, 2006

COMMISSIONER FOR PATENTS

Mail Stop Amendment P.O. Box 1450

Alexandria, VA 22313-1450

—filed electronically via EFS-Web—

## RESPONSE TO RESTRICTION REQUIREMENT

Dear Sir:

This paper is responsive to the Office Action dated October 13, 2006, having a shortened statutory period expiring November 13, 2006. No extension of time is believed to be required to respond to the Action; however, in the event any extension of time is required, please consider that extension requested and please charge any associated fee, and any additional required fees, to deposit account number 50-2053.

In that Action, the Examiner set forth a restriction requirement between Claims 1-10 and 22 (group I) and Claims 11-21 (group II). Applicants respectfully traverse the restriction requirement and would submit that these claim sets are not subject to restriction, as they each pertain to a fused Booth encoder multiplexer (selector) designed for a multiplier circuit. Independent Claim I recites in the preamble a "fused Booth encoder multiplexer logic cell," and independent Claim 22 recites in the preamble a "logic circuit for a fused Booth encoder multiplexer logic cell." Although Claims 1 and 22 do not recite a multiplier circuit as an

element, the logic circuits of Claims 1 and 22 are adapted for use with a multiplier circuit as evidenced from the recitation of "multiplier input bits and multiplicand input bits" in Claim 1 and of "multiplicand and multiplier inputs" in Claim 22. Independent Claim 11 recites a "multiplier circuit" which includes "a fused Booth encoder multiplexer unit." Independent Claim 16 recites an arithmetic logic unit having "a multiplier ..., said multiplier having a fused Booth encoder selector." Accordingly, each pending claim refers to the novel fused Booth encoder multiplexer of the present invention, and there will be no undue burden on the examiner in searching and examining all of these claims.

Subject to the foregoing, Applicants provisionally elect Claims 1-10 and 22 (group I) for further prosecution in this case.

Applicants have made a diligent effort to advance the prosecution of this application by pointing out with specificity why the claims should not be restricted and by making a provisional election. In view of the remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned.

Respectfully submitted,

/Jack V. Musgrove/

Jack V. Musgrove Attorney for Applicant(s) Reg. No. 31,986 Telephone: 512-689-6116